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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,306	05/24/2000	Bastiaan Hendrik Bakker	F3238(C)	4727

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EXAMINER

SORKIN, DAVID L

ART UNIT PAPER NUMBER

1723

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/577,306	BAKKER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	David L. Sorkin	1723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 5,6,13-15,20 and 24 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5, 6, 15, 20 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5, 6, 15, 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rauwendaal (US 5,932,159) in view of Fels et al. (US 5,345,781). Regarding claim 20, Rauwendaal ('159) discloses a single screw extruder (see col. 7, lines 20-26) comprising an extruding screw (28) and a barrel (18) characterized by from 3 to 4 thread starts (see col. 7, lines 20-26). A pitch range (30-90 degrees) which overlaps the claimed range is disclosed (see col. 10, lines 60-64). In cases where claimed ranges "overlap or lie inside ranges disclosed by the prior art a *prima facie* case of obviousness exists" (*In re Wertheim*, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 16 USPQ2d 1934 (Fed. Cir. 1990)). It is further noted that according to the instant specification, the claimed range of 32-42 degrees is not critical, but merely "preferable". Rauwendaal ('159) does not disclose a cooling circuit comprising liquid ammonia. Fels ('781) teaches providing a screw extruder with a cooling circuit comprising ammonia (see col. 3, lines 45-47; col. 11, lines 10-17). It is considered that it would have been obvious to one of ordinary skill in the art to have provided the extruder of Rauwendaal ('159) with a cooling circuit comprising liquid ammonia because Rauwendaal ('159) states "mixing should be done at as low a temperature as possible" (col. 2, lines 9-10)

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and Fels ('781) teaches that a liquid ammonia cooling circuit provides an extruder with such conditions (see col. 3, lines 45-47; col. 11, lines 10-17). Furthermore, both references discuss extruding similar foods with the extruders. For example, both references discuss fruit slurries. See col. 4 lines 52-59 of Fels ('781) and col. 14, lines 44-45 of Rauwendaal ('159). Regarding claims 5 and 15, Rauwendaal ('159) discloses a length to diameter ratio which overlaps the claimed ranges (see col. 10, lines 60-65). Regarding claim 6, channel width and height are recognized a variable to be optimized according to equations provided (see col. 10, lines 1-16). It is considered that it would have been obvious to one of ordinary skill in the art to have optimized these variables according to the equations provided. As held in *In re Aller*, 105 USPQ 233, "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation". Regarding claim 24, "the manner or method in which such machine is to be utilized is not germane to the issue of patentability of the machine itself" *In re Casey*, 152 USPQ 235 (CCPA 1967).

### ***Response to Arguments***

3. Applicant correctly points out that the specification need not disclose values as critical for applicants to present evidence showing the values are critical. However, firstly, the specification goes beyond just not stating that the now-claimed values are critical, to actual state on page 4, lines 6-9 that it is an "object of the present invention to provide an extruder" having values other than those that applicant now argue are critical. Secondly, applicant has not provided any evidence other than what is in the specification.

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4. Applicant states that "the ice cream temperature at 35-40 degrees is a good 1 degree below the temperature achieved for smaller pitch angles". However, smaller pitch angles are within the scope of the claims, and applicant explains that there is a substantial margin of error in measuring the temperature. Furthermore, 19 degrees pitch angle yield and 40 degree pitch angle are both capable of providing the same temperature of -12 degrees according the data in the specification.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 571-272-1148. The examiner can normally be reached on 9:00 -5:30 Mon.-Fri..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
David L. Sorkin  
Primary Examiner  
Art Unit 1723

DLS